

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1 to 15 (Canceled)

16. (New) A method for verifying the charge invoicing for a communications connection according to time intervals, a testing device able to simulate at least one calling, analog terminal device and at least one called terminal device being connected to at least one network node that can generate time pulses; the method comprising the following method steps:

at least one predetermined test-communications connection is set up and cleared again via at least the one network node;

the interval between the start of the test-communications connection and the generation of a first time pulse is ascertained, and it is checked if the ascertained interval is within a first predetermined time domain;

during the existing test-communications connection, time-unit intervals of consecutive time pulses are measured and compared to a predetermined time interval; and it is checked if at least one additional time pulse has been received after the end of the test-communications connection;

if yes, the interval between the end of the test-communications connection and the at least one time pulse is ascertained, and it is checked if the ascertained interval is within a second predetermined time domain.

17. (New) The method as recited in claim 16, wherein it is further checked if the number of time pulses occurring after the end of the test-communications connection is less than, greater than, or equal to a predetermined, maximum number y of time pulses.

18. (New) The method as recited in claim 16, wherein the time interval between the start of the test-communications connection and the generation of the first time pulse is ascertained, using the following steps:

the occurrence of a first predetermined event (connect; loop connection), which corresponds to the measurable start of the test-communications connection, is detected at a first predetermined measuring point of the testing device;

the reception of the first time pulse of the test-communications connection generated by the network node is detected at a second predetermined measuring point of the testing device; and

a time measurement is started or stopped as a function of the detected occurrence of the first predetermined event (connect; loop connection) and the reception of the first time pulse.

19. (New) The method as recited in claim 18, wherein the systematic measuring errors between the location of the actual occurrence of the start of the test-communications connection and the first measuring point of the testing device is ascertained;

the systematic measuring error between the location of the actual generation of the first time pulse and the second measuring point of the testing device is ascertained; the interval between the detected occurrence of the first predetermined event and the reception of the first time pulse is measured and corrected by the amount of the systematic measuring error; and

it is checked if the corrected interval is within the first predetermined time domain.

20. (New) The method as recited in claim 16, wherein the time intervals of consecutive time pulses are measured, using the following steps:

the first time pulse received by the calling, analog terminal device starts a first time measurement;

each subsequent time pulse received by the calling, analog terminal device stops the time measurement, which has been started by the immediately preceding time pulse, and starts a further time measurement;

an i^{th} time measurement is started by the last time pulse of the test-communications connection.

21. (New) The method as recited in claim 20, wherein each initiated time measurement is assigned a serial number.

22. (New) The method as recited in claim 21, wherein the time interval between the end of the test-communications connection and a first time pulse received after the end of the test-communications connection is ascertained, using the following steps:

a time measurement is initiated, when a second predetermined event (disconnect; loop interruption), which corresponds to the measurable end of the test-communications

connection, occurs at the first or second predetermined measuring point of the testing device; the time measurement initiated by the second predetermined event is stopped, when the first time pulse is received at the second predetermined measuring point of the testing device after the end of the test-communications connection; and

the value of the time measurement is compared to the second predetermined time domain.

23. (New) The method as recited in claim 22, wherein, when the second predetermined event (disconnect; loop interruption) occurs at the first or second predetermined measuring point of the testing device, the number of the currently active time measurement of the time interval of two consecutive time pulses is acquired;

the time interval between the end of the test-communications connection and further time pulses received after the end of the test-communications connection is ascertained, using the following steps:

the value of the time measurement for the time interval between the end of the test-communications connection and the first time pulse received after the end of the test-communications connection, and the values of all time measurements for time intervals of consecutive time pulses, whose numbers are each greater than the number of the time measurement acquired in response to the occurrence of the second predetermined event (disconnect; loop interruption) at the first or second predetermined measuring point of the testing device, are added and compared to the second predetermined time domain.

24. (New) The method as recited in claim 22, wherein the systematic measuring errors between the location of the actual occurrence of the end of the test-communications connection and the first and/or second measuring point of the testing device is ascertained;

the systematic measuring error between the location of the actual generation of time pulses and the second measuring point of the testing device is ascertained;

the time interval between the occurrence of the second predetermined event (disconnect; loop interruption) and the reception of the first time pulse occurring after the end of the test-communications connection is measured and corrected by the amount of the systematic measuring error.

25. (New) The method as recited in claim 18, wherein the first measuring point is defined by the called terminal device; and

the second measuring point is defined by the calling, analog terminal device,

the test-communications connection also being able to be ended at the two terminal devices.

26. (New) A testing device for connection to at least one network node, which is to be tested and may emit time pulses, comprising:

 a call simulator for simulating at least one calling, analog terminal device and for simulating at least one further terminal device, which may be operated as a called terminal device;

 a first detector device for detecting time pulses;

 a second detector device for detecting a first predetermined event (connect, loop closure), which corresponds to the measurable start of a test-communications connection; the first and/or second detector device being designed to detect a second predetermined event (disconnect; loop interruption), which corresponds to the measurable end of a test-communications connection;

 a first time-measuring device for measuring, in each instance, time intervals of two consecutive time pulses;

 a second time-measuring device for measuring the interval between the occurrence of the first predetermined event and the reception of the first time pulse of a set up test-communications connection;

 a third time-measuring device for measuring the interval between the occurrence of the second predetermined event and the reception of at least one time pulse after the measured end of the test-communications connection; and

 an evaluation device for comparing the measured time spans of the respective time-measuring devices to corresponding, predetermined time domains.

27. (New) The testing device as recited in claim 26, wherein the evaluation device is designed to check if the number of time pulses occurring after the end of the test-communications connection is less than, greater than, or equal to a predetermined, maximum number y of time pulses.

28. (New) The testing device as recited in claim 26, comprising:

 a storage device, in which the systematic measuring error between the location of the actual start of a test-communications connection and the second detector device is stored, and in which the systematic measuring error between the location of the actual end of a

test-communications connection and the first or second detector device is stored, and in which the systematic measuring error between the location of the actual generation of time pulses and the first detector device of the testing device is stored;

a correction device connected to the storage device for correcting the values measured by the first, second, and third time-measuring devices by the amount of the specific systematic measuring error; and

the evaluation device being designed to compare the measured and corrected time spans to corresponding, predetermined time domains.

29. (New) The testing device as recited in one of 16 wherein a device for serially numbering consecutive time intervals is provided;

in response to the numbers assigned to the time intervals, the third time-measuring device may detect if a time interval has been measured in the first time-measuring device after the detection of the second predetermined event (disconnect, loop interruption); and

the third time-measuring device or the evaluation device may add the value for the interval between the end of the test-communications connection and the first time pulse received after the end of the test-communications connection and the values of all of the measured time intervals, whose numbers are, in each instance, greater than the number of the time interval that has been instantaneously measured in response to the occurrence of the second predetermined event (disconnect; loop interruption) at the first or second detector device of the testing device.

30. (New) The testing device as recited in claim 10, wherein the first detector device is assigned to the calling, analog terminal device, and the second detector device is assigned to the called terminal device.